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## DESCRIPTION OF THE PREPARATORY STAGES OF COLIAS CAESONIA, Stoll.

BY W. H. EDWARDS, COALBURGH, W. VA.

Ecc.—Fusiform, thick in middle, tapering to a small rounded summit; marked by about 18 longitudinal ribs, these being low, narrow, the spaces between flat and crossed by many fine ridges. Color yellov green. Duration of this stage about four days.

YOUNG LARVA.—Length .08 inch; cylindrical, thickest anteriorly; on the ridges of the segments many black points, each with a short black hair; among these are black tubercles, some with long hairs, but most with white clubbed appendages, which form three longitudinal rows on either side, one appendage in the row to the segment; these rows are sub-dorsal, upper and lower lateral; color greenish-white, with a tint of brown; head rounded, a little depressed at top; on the face many rounded tubercles, each with depressed black hair; color pale yellow-brown. Duration of this stage four to five days.

After first moult: Length .14 inch; the ridges thickly beset with black points, each with black hair; among these are small tubercles of same color, mostly on middle of each ridge, with longer hairs; along base a yellowish narrow stripe, and over it, on 3 and 4 each, a rounded black process; another larva showed this stripe only near the close of the stage, and had not the black process; color yellow-green; head rounded, nearly same green as the body, the tubercles and hairs more numerous than before. To next moult four to five days.

After second moult: Length .21 inch; color yellow-green, with yellowish basal band; the processes on 3 and 4 as before, shining, black; head yellow-green, more thickly covered with small tubercles, scattered among which are others, larger. To next moult three to four days.

After third moult: Length .32 to .38 inch; color yellow-green, the band greenish-white; the two processes on 3 and 4 present; on dorsum